

حمل الآن

المراجعة رقم (1)



Model (1)



1 (A) Complete the following sentences using the words between brackets:

1. Air resistance acts in the .... direction of motion. (same – opposite)
2. The sun appears in the .... during the early morning. (east – west)

(B) Give a reason for:

1. The moon's gravity is less than the Earth's gravity.

....

2. Occurrence of day and night.

....

2 (A) Put (✓) or (✗):

1. Magnetism is a pulling force only. ( )
2. All parts of Earth receive sunlight at the same time. ( )

(B) What happens when ...?

1. A feather and a hammer fall from the same height at the same time in a vacuumed room.

....

2. Half of Earth faces the Sun.

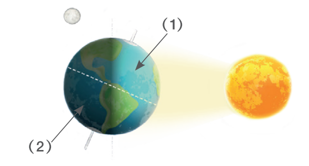
....

3 (A) Which body does the Earth attract more "a body with a mass of 100 kg or another body with a mass of 400 kg? And why?

....

....

(B) Look at the opposite figure, then answer.



- Side (1) is at .... , while side (2) is at ....

Model (2)



1 (A) Choose the correct answer:

1. Which of the following has the least gravity?

a)The Earth. b) The Sun. c) The moon. d) A magnet.

2. The fastest planet that rotates on its axis in the solar system is ....

a) the Sun b) Earth c) Jupiter d) the moon

(B) Give a reason for:

1. Astronauts float in space.

....

2. Occurrence of seasons.

....

2 (A) Write the scientific term:

1. The force that opposes the motion of a body across a solid surface or through a gas or liquid. (............)

2. A series of events that is repeated in the same order. (............)

(B) What happens if ...?

1. The mass of the moon becomes twice its real mass.

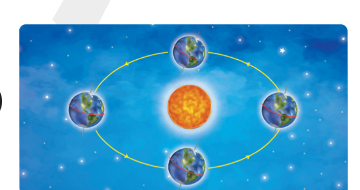
....

....

2. The Earth stops spinning on its axis.

....

3 Look at the opposite figure, then answer:



1. This figure illustrates the cycle of (day and night – the four season) on Earth.

2. This figure represents the (rotation – revolution) of the Earth around the Sun.

Model (3)

5 Marks

1 (A) Complete the following sentences using the words between brackets:

1. The planets revolve around the Sun in .... orbits. (circular – elliptical)
2. The sun produces .... energy that warms the Earth. (light – heat)

(B) What happens if …?

1. The sun loses its gravity.

....

2. Binoculars and telescopes were not invented.

....

2 (A) Choose the correct answer:

1. Wind turbines move by the effect of ....

a) gravity b) magnetism c) wind motion d) friction

2. The star that is present in our solar system is ....

a) the moon b) the sun c) Earth d) Jupiter

(B) Look at the opposite figures, then answer:

1. The magnets in Figure (1) attract or repel, and why?

....

2. The magnets in Figure (2) attract or repel, and why?

....

Fig. (1)

S N N S

Fig. (2)

S N S N

3 Give a reason for:

1. When you stop pedaling, the speed of the bicycle decreases until it stops.

....

....

2. Stars seem to move in the sky.

....

Model (4)

5 Marks

1 **(A) Write the scientific term:**

1. A fixed path where a planet revolves around the Sun. (..........................)
2. It is a group of stars, planets, and gases held together by gravity. (..........................)

(B) What happens to ...?

1. The gravity of the moon when its mass decreases to half.

....

2. The length of the shadow of an object at noon.

....

2 **(A) Cross out the odd word:**

1. A magnet attracts paper clips – A kid kicks a ball – An apple falls towards the ground – The revolution of planets around the Sun (..........................)
2. Earth – Jupiter – The Sun – The moon. (..........................)

(B) Give a reason for:

1. The Sun is considered the center of motion of the solar system.

....

2. The moon has different phases in the night sky.

....

3 **(A) What is meant by magnetism?**

....

....

(B) Compare between:

The Sun	The moon
....	....
....	....

Model (5)

5 Marks

1 (A) Correct the underlined words:

1. The Sun affects the ocean tides. (..................)
2. The Earth spins around its axis once every 28 hours. (..................)

(B) Write the name of the moon phase for each of the following:

1. The apparent face of the moon that faces the Earth is fully darkened. (..................)
2. The apparent face of the moon that faces Earth is fully illuminated. (..................)

2 (A) Complete the following sentences using the words between brackets:

1. The scientist Nicolaus Copernicus stated that the ....

(the moon revolves around the Earth – the Earth revolves around the Sun)

2. A constellation consists of a group of .... that form a pattern.

(stars – planets)

(B) Give a reason for:

1. A skydiver opens his parachute during landing.

....

2. The sun looks much larger to us than other stars.

....

3 (A) What are the factors that affect the gravitational force of the moving objects?

....

(B) Define ...:

- Moon phases:

....

Model (1)



1 (A) Complete the following sentences using the words between brackets:

1. Air resistance acts in the .... direction of motion. (same – **opposite**)
2. The sun appears in the .... during the early morning. (**east** – west)

(B) Give a reason for:

1. The moon's gravity is less than the Earth's gravity.
   - Because the moon has less mass than the Earth.
2. Occurrence of day and night.
   - Due to the rotation of the Earth around its axis.

2 (A) Put (✓) or (✗):

1. Magnetism is a pulling force only. (✗)
2. All parts of Earth receive sunlight at the same time. (✗)

(B) What happens when ...?

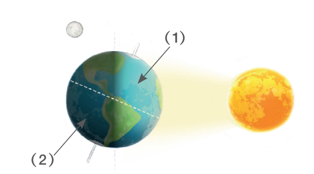
1. A feather and a hammer fall from the same height at the same time in a vacuumed room.
   - They will reach the ground at the same time.
2. Half of Earth faces the Sun.
   - This half of Earth has day.

3 (A) Which body does the Earth attract more "a body with a mass of 100 kg or another body with a mass of 400 kg? And why?

- The Earth attracts the body with a mass of 400 kg more than the body with a mass of 100 kg. Because the gravitational force increases between objects by increasing the mass.

(B) Look at the opposite figure, then answer.

- Side (1) is at ......**day**...... , while side (2) is at ......**night**...... .



Model (2)



1 (A) Choose the correct answer:

1 Which of the following has the least gravity?

a)The Earth. b) The Sun. **c) The moon.** d) A magnet.

2 The fastest planet that rotates on its axis in the solar system is ....

a) the Sun b) Earth **c) Jupiter** d) the moon

(B) Give a reason for:

1 Astronauts float in space.

- Due to the absence of gravity in space.

2 Occurrence of seasons.

- Due to the revolution of Earth around the Sun.

2 (A) Write the scientific term:

1 The force that opposes the motion of a body across a solid surface or through a gas or liquid. (**Friction**)

2 A series of events that is repeated in the same order. (**Cycle**)

(B) What happens if ...?

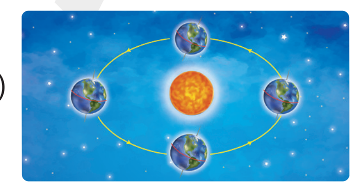
1 The mass of the moon becomes twice its real mass.

- The gravitational force between the Earth and the moon increases, and the moon would be pulled closer to the Earth and might crash into it.

2 The Earth stops spinning on its axis.

- The phenomenon of day and night will not occur.

3 Look at the opposite figure, then answer:



1 This figure illustrates the cycle of (day and night – **the four season**) on Earth.

2 This figure represents the (rotation – **revolution**) of the Earth around the Sun.

Model (3)



1 (A) Complete the following sentences using the words between brackets:

1. The planets revolve around the Sun in .... orbits. (circular – **elliptical**)
2. The sun produces .... energy that warms the Earth. (light – **heat**)

(B) What happens if …?

1. The sun loses its gravity.
   - The planets would fly off into space.
2. Binoculars and telescopes were not invented.
   - Scientists can't study distant objects like stars.

2 (A) Choose the correct answer:

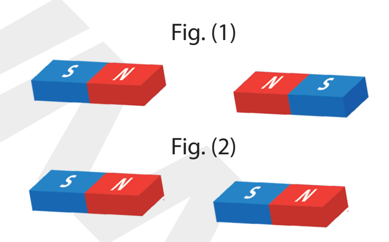
1. Wind turbines move by the effect of ....

a) gravity b) magnetism **c) wind motion** d) friction

2. The star that is present in our solar system is ....

a) the moon **b) the sun** c) Earth d) Jupiter

(B) Look at the opposite figures, then answer:



1. The magnets in Figure (1) attract or repel, and why?
   - The magnets repel because they are like poles.
2. The magnets in Figure (2) attract or repel, and why?
   - The magnets attract because they are unlike poles.

3 Give a reason for:

1. When you stop pedaling, the speed of the bicycle decreases until it stops.
   - Due to the friction force between the tires and the ground in the opposite direction of motion.
2. Stars seem to move in the sky.
   - Due to the rotation of the Earth around its axis.

Model (4)



1 (A) Write the scientific term:

1. A fixed path where a planet revolves around the Sun. (**Orbit**)
2. It is a group of stars, planets, and gases held together by gravity. (**Galaxy**)

(B) What happens to …?

1. The gravity of the moon when its mass decreases to half.

– **Its gravity decreases to half.**

2. The length of the shadow of an object at noon.

– **The shortest shadow of the object is formed.**

2 (A) Cross out the odd word:

1. A magnet attracts paper clips – A kid kicks a ball – An apple falls towards the ground – The revolution of planets around the Sun (**A kid kicks a ball**)
2. Earth – Jupiter – The Sun – The moon. (**The Sun**)

(B) Give a reason for:

1. The Sun is considered the center of motion of the solar system.

– **Because the Sun has the greatest mass in the solar system so it has the greatest gravity.**

2. The moon has different phases in the night sky.

– **Due to the revolution of the moon around the Earth.**

3 (A) What is meant by magnetism?

– **It is an invisible force of attraction or repulsion between two magnets or a magnet and a magnetic material.**

(B) Compare between:

The Sun	The moon
It is a star.	It is a dark body.
It produces its own light.	It reflects the sunlight that falls on it.

Model (5)



1 (A) Correct the underlined words:

1. The Sun affects the ocean tides. (**The moon**)
2. The Earth spins around its axis once every 28 hours. (**24**)

(B) Write the name of the moon phase for each of the following:

1. The apparent face of the moon that faces the Earth is fully darkened. (**New moon**)
2. The apparent face of the moon that faces Earth is fully illuminated. (**Full moon**)

2 (A) Complete the following sentences using the words between brackets:

1. The scientist Nicolaus Copernicus stated that the ....

   (the moon revolves around the Earth – **the Earth revolves around the Sun**)

2. A constellation consists of a group of .... that form a pattern.

   (**stars** – planets)

(B) Give a reason for:

1. A skydiver opens his parachute during landing.

– Because the air resistance slows down their fall to the Earth's surface.

2. The sun looks much larger to us than other stars.

– Because it is the nearest star to us.

3 (A) What are the factors that affect the gravitational force of the moving objects?

- The mass of the object, the distance between the objects.

(B) Define ...:

- Moon phases:

– They are the different shapes of the illuminated part of the Moon as seen from Earth.



كيفية طباعة صفحات معينة من ملف معين

مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9



خطوة 1
File → Print... Ctrl+P

خطوة 2
اختيار اسم الطابعة بتاعتك

خطوة 3
كتابة الصفحات المراد طباعتها
نكتب رقم 4 ثم نكتب الشرطة دي – ثم نكتب 9

Pages: 4 - 9

خطوة 4
اختيار نوع الورق
Page Setup...

خطوة 5
اختيار A4

Paper Size: A4

خطوة 6
Print

المراجعة رقم (2)

اختبار شهر مارس





Model Exam 1

On Concept [3.2]

Total mark
15

1 **(A) Choose the correct answer :** *(5 marks)*

1. The level of water in a river may increase causing flooding, when there is more ....
   a. rainfall. b. wind. c. sunlight. d. sediments.
2. Plastic cup is made from .... products.
   a. plant b. animal c. oil d. human
3. The natural resource which is important to the survival of all living organisms is ....
   a. soil. b. oil. c. water. d. grass.
4. .... are formed when water collects in low-lying areas.
   a. Seas b. Lakes c. Rivers d. Oceans

(B) Give a reason for the following :

Scientists tend to preserve freshwater sources on Earth.

....

....

2 **(A) Write the scientific term of each of the following :** *(5 marks)*

1. The water bodies that surround the continents. (....................)
2. It means using resources in a way that does not negatively affect the future supply of these resources. (....................)
3. They are small water bodies such as small creeks or streams that flow into bigger rivers. (....................)
4. It is a land area which is partially covered with water. (....................)

(B) Put (F) in front of the sources of fresh water and (S) in front of the sources of salt water :

1. Nile River. (....................)
2. Seas. (....................)
3. Water streams. (....................)
4. Lake Assal. (....................)

3 (A) Complete the following sentences : *(5 marks)*

1. Wastewater engineers can test the quality of .... by checking for the amount of .... in water.
2. When the rate of rainfall decreases, the level of water in rivers will .... causing ....
3. Clothes can be made from .... products or .... products.
4. Cotton, ... and .... can be used in making a simple water filter.

(B) Write the scientific term of each of the following :

1. A type of water which is suitable for drinking. (....................)
2. A water body that often starts in the mountain as a stream. (....................)

Model Exam 2

On Concept [3.2]

Total mark
15

1 (A) Choose the correct answer : *(5 marks)*

1. Among the risks that threaten lots of fresh water areas on Earth are ....
   a. conservation and scarcity.
   b. scarcity and poor quality.
   c. conservation and poor quality.
   d. conservation and extinction.
2. The area of land where all the water flows in one direction to a common location as ocean is called ....
   a. tributary.
   b. estuary.
   c. wetland.
   d. watershed.
3. Prevent developing of Ras Mohammed Protectorate is considered as an example of ....
   a. preservation.
   b. pollution.
   c. sustainability.
   d. consumption.
4. The amount of salt water on the Earth is .... the amount of fresh water.
   a. larger than
   b. smaller than
   c. equal to
   d. half

(B) Give a reason for the following :

We should turn off water during washing dishes.

....

....

2 (A) Put (✓) or (✗) : *(5 marks)*

1. Dams can be used to filter polluted water to be used again. (   )
2. You can conserve water by leaving the tap open during brushing your teeth. (   )
3. Upstream is the place where a river starts. (   )
4. The type of water in oceans is salt water only. (   )

(B) What happens if ...?

The river water meets the sea water.

....

....

3 **(A) Complete the following sentences using the words below :** *(5 marks)*

(electricity – quality – rains – dam)

1. Building a .... across a tributary can change the amount of water in it.
2. The extinction of some species that live in fresh water is due to the poor .... of water.
3. In High Dam, water is used to generate ....
4. Groundwater is replaced by ....

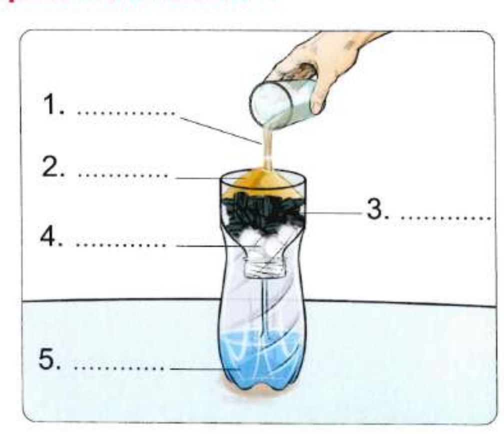
(B) Look at the opposite figure, then answer the questions below :

1. **Label the figure using the following words :**

   (Charcoal – Wastewater – Cotton – Filtered water – Sand).

2. **Complete the following sentence :**

   The opposite tool shows a simple ...., and it is used to remove .... materials from wastewater.



Model Exam 1

On Concept [4.1]

Total mark
____
15

1 (A) Put (✓) or (✗) : *(5 marks)*

1. Earth's gravity pulls objects toward the center of Earth. ( )
2. Magnetism is a type of friction force. ( )
3. There is no air in space, so air resistance slows down the movement of objects through space. ( )
4. The scientist Nicolaus Copernicus stated that Earth revolves around the Sun. ( )

(B) Give a reason for the following :

Gravity of Earth is greater than gravity of the moon.

....

....

2 (A) Complete the following sentences : *(5 marks)*

1. The gravity of the moon affects the phenomenon of ocean ....
2. A person can control the speed of his bike by using .... to slow down its movement.
3. The force that keeps all planets around the Sun is called ....
4. When the distance between the moon and Earth increases, the gravitational attraction between them ....

(B) What happens if ...?

You throw two iron balls have the same mass from the same height.

....

....

3 (A) Write the scientific term : *(5 marks)*

1. The force by which metals are attracted or pulled to a magnet. (......................)
2. The tool that is used by skydiver to slow his drop. (......................)
3. The force that opposes the motion of a body across a solid or liquid or gas. (......................)
4. The effect that pulls or pushes an objects to make it moves. (......................)

(B) Correct the underlined word :

Planets revolve around the <u>Earth</u> due to the gravity between them. (......................)

Model Exam 2

On Concept [4.1]

Total mark
/15

1 (A) Complete the following sentences : *(5 marks)*

1. The moon moves around .... due to gravity.
2. Magnet can attract some objects by a force called ....
3. The force of gravity is .... force and it changes the .... of movement.
4. The force of gravity is .... and acts on all objects in the same way.

(B) What happens to ...?

The planets if the Sun has no gravity.

....

2 (A) Put (✓) or (✗) : *(5 marks)*

1. Air resistance is a type of friction force. ( )
2. Friction force opposes the movement of an object. ( )
3. The direction and mass of an object are changed due to gravity. ( )
4. When using the bicycle brake, the bicycle stops due to the friction force between the brake and the tires. ( )

(B) Correct the underlined word :

The gravity of the <u>Sun</u> affects the ocean tides. (....................)

3 (A) Choose from column (B) what suits it in column (A) : *(5 marks)*

(A)	(B)
1. Magnetism 2. Gravity 3. Force 4. Air resistance	a. is the force of attraction between objects that have mass. b. is a pull or push that affects an objects. c. is the change of an object location due to force. d. is the force between two magnets or between the magnet and an object. e. is the force that opposes the movement of an object through air.

1. .... 2. .... 3. .... 4. ....

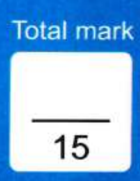
(B) Give a reason for the following :

The moon is attracted to Earth.

....

Model Exam
on Concept (4.1)

Total mark



1 (A) Complete the following sentences : *(5 marks)*

1. If the mass of the moon increases more than its real mass, its gravitational attraction will ....
2. Magnet can attract some objects by a force called ....
3. A parachute in air is affected by .... that acts against the .... force of Earth.
4. The Sun is located at the center of ....

(B) What happens if ... ?

A metal ball and a feather are falling down from a tower.

....

....

2 (A) Choose the correct answer : *(5 marks)*

1. A table stands on the ground needs .... to move.
   a. sunlight b. mass c. force d. air
2. Which of the following objects has the least attraction force ? ....
   a. The moon. b. Earth. c. The Sun. d. The magnet.
3. .... is a factor that acts against gravity force.
   a. Magnetism
   b. Mass of an object
   c. Air resistance
   d. Shape of an object
4. The speed of Earth's revolution around the Sun is nearly .... km per hour.
   a. more than 100,000
   b. more than 200,000
   c. less than 100,000
   d. less than 50,000

(B) Give a reason for the following :

The force of gravity has an important role in the solar system.

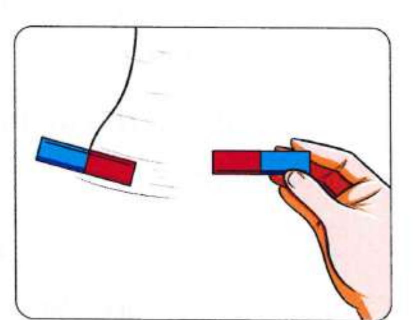
....

....

3 (A) Write the scientific term : *(5 marks)*

1. The force that slows down the movement of objects through air. (..............)
2. The pulling force that causes objects to fall down toward Earth's surface. (..............)
3. A phenomenon takes place in oceans and seas due to the gravity of the moon. (..............)
4. The force that attracts paper clips to the magnet. (..............)

(B) Look at the opposite figure, then choose the correct answer :



1. The force between the two magnets is called ....
   a. gravity.
   b. magnetism.
   c. contact force.
   d. wind force.
2. If there is a repulsion force between these two magnets so, they will move ....
   a. away from each other.
   b. toward each other.
   c. to the Earth's surface.
   d. to the space.

Self-Assessments
on Concept (4.2)

Self-Assessment 16 On Lesson 1

1 **(A) Choose the correct answer :**

1. The imaginary line that passes from the north pole to the south pole through Earth's center is called ....
   a. the day. b. the axis. c. the night. d. the pole.
2. The orbiting of an object around another object is called ....
   a. revolution. b. spinning. c. rotation. d. speed.
3. In late afternoon, the Sun appears in the .... direction in the sky.
   a. east b. west c. north d. south

(B) Give a reason for the following :

The Sun appears as it is moving from east to west.

....

....

2 **(A) Put (✓) or (✗) :**

1. Stars and planets appear to move in the sky due to revolution of Earth around the Sun. ( )
2. Earth takes a whole day to make one complete turn around the Sun. ( )
3. The half of Earth that faces the Sun has day. ( )

(B) What happens to ... ?

The part of Earth that doesn't receive sunlight.

....

....

3 **Complete the following sentences using the words below :**

(the center of the sky – Earth – east – axis – 24 hours)

1. Occurrence of day and night is due to the rotation of .... on its ....
2. Earth completes one rotation on its axis once every ....
3. In the early morning the Sun appears in the .... while at noon it appears in ....

April Tests

Model 1

Total mark

15

1 (A) Put (✓) or (✗) : *(5 marks)*

1. The gravity of moon affects the ocean tides. ( )
2. Force is the reason of motion of any body. ( )
3. Air resistance is a factor that speeds up the falling objects toward Earth. ( )
4. The Earth revolves around the Sun once every 24 hours. ( )

(B) Give a reason for the following :

Occurrence of seasons.

....

2 (A) Choose the correct answer : *(5 marks)*

1. Magnetism is a force that attracts objects made of the following materials, except ....
   a. iron. b. nickel. c. wood. d. cobalt.
2. Gravitational force of Earth is affected by ....
   a. mass and time. b. mass and distance.
   c. mass only. d. distance only.
3. Day and night phenomenon occurs due to the rotation of Earth around ....
   a. the Sun. b. its axis. c. the moon. d. the solar system.
4. The force of .... keeps the planets on their paths around the Sun.
   a. air resistance b. friction c. electricity d. gravity

(B) What happens if ... ?

There is no gravity on Earth.

....

3 (A) Write the scientific term of each of the following : *(5 marks)*

1. The pulling force that causes object to fall down toward Earth's surface. (..........................)
2. A phenomenon takes place in oceans and seas due to gravity of moon. (..........................)
3. A type of friction force that opposes the movement of an object as it passes through air. (..........................)
4. An imaginary line that passes through the two poles of Earth. (..........................)

(B) Correct the underlined word :

The only star in the solar system is the <u>Earth</u>. (..........................)

Total mark
/15

Model 2

1 (A) Complete the following sentences using the words below : *(5 marks)*

(Earth – force – orbits – cycle)

1. The object at rest needs .... to move.
2. A series of events that is repeated in the same order is called ....
3. The moon moves around .... due to gravity.
4. In solar system, all planets revolve in fixed paths called ....

(B) What happens to ... ?

The speed of skydiver if he opens his parachute during landing.

....

2 (A) Put (✓) or (✗) : *(5 marks)*

1. The Earth's gravity keeps all planets in their orbits. (   )
2. The Sun would be above you in the center of the sky at noon and at night. (   )
3. Any object on Earth's surface is affected by repulsion force of gravity. (   )
4. A magnet has an invisible force called magnetism. (   )

(B) Give a reason for the following :

The gravity between two objects is affected by the distance between them.

....

3 (A) Choose from column (B) what suits it in column (A) : *(5 marks)*

(A)	(B)
1. Earth	a. is the force that opposes the movement of an object through air.
2. Gravity	b. is the planet that completes one cycle on its axis in 24 hours.
3. Jupiter	c. is the fastest planet that rotates on its axis.
4. Air resistance	d. is a spacecraft that orbits the Earth.
	e. is the force of attraction between objects that have mass.

1. .... 2. .... 3. .... 4. ....

(B) Correct the underlined word :

The Earth orbits the Sun in a rectangular path. (........................)

المراجعة رقم (3)

اختبار شهر مارس





Concept 3.2 Water as a Valuable Natural Resource

1 Summary of Concept 2

- There are many natural resources on Earth, such as water, plants, and metals.
- Most of the water on Earth is salt water.
- We must conserve fresh water and protect it from pollution.

Sources of Water

Salt Water	Fresh Water		Mixture of Salt and Fresh Water
• Oceans • Seas • Some lakes	• Rivers • Glaciers • Wetlands	• Streams • Groundwater • Most lakes	• Estuaries

Uses of Water

» In Egypt, water can be used in many purposes, such as:

- Generating electricity (in Aswan High Dam)
- Agriculture

» Around the world, many people work on the water by:

- Fishing
- Transporting goods

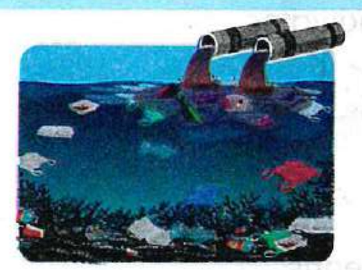
Risks that Threaten Fresh Water

1 Scarcity of fresh water



The scarcity of fresh water threatens the survival of living organisms.

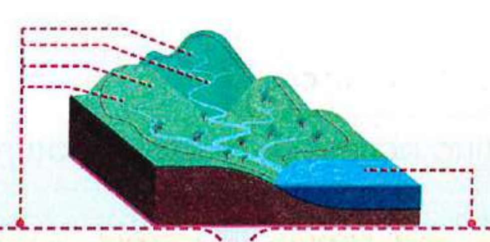
2 Poor quality of fresh water



The poor quality of fresh water leads to the death or extinction of some species of fish and amphibians.

Bodies of Water

Body of Water	Type of Water	Location	Other Information
Rivers	Fresh water	• Start in: mountains as streams. • End in: seas, or larger rivers.	
Lakes	• Most have fresh water. • Some have salt water.	They are formed when water is collected in low-lying areas.	A lake is a large body of water surrounded by land.
Wetlands	Fresh water	A land that is partially covered with water.	Types of wetlands: • Swamps (marches) • Ponds (bogs)
Estuaries	A mixture of fresh water and salt water	An estuary is formed when a river meets an ocean or a sea.	Estuaries are homes to thousands of plants and animals.
Groundwater	Fresh water	It is the water stored in the cracks and spaces of underground rocks.	
Oceans	Salt water	They are large bodies of water that surround the continents.	• All oceans are connected to each other. • The ocean's floor has mountains, plains, and plateaus.



Tributaries: They are small bodies of water, such as small creeks or streams, that flow into larger rivers.

Watershed: It is an area of land where all the water from different sources flows towards a common location.

Tributaries (Small creeks or streams) → Flow in → **Big rivers** → Flow in → **Larger bodies of water** (Bays, seas, or oceans)

- Rivers start upstream and end downstream.
- What happens upstream will affect the bodies of water downstream.



The Effect of Rain on a Body of Water

If	Then
There is more rainfall than a river or a stream can handle.	The water level will increase, causing flooding.
There is too little rainfall on a river or a stream.	The water level will decrease, causing drought.





- Watershed maps can help scientists understand how bodies of water interact with each other.

Scenario	Result
If a factory is established near a tributary,	This affects the water quality, where it causes water pollution of other bodies of water connected to this tributary.
If a farm near a tributary uses chemical fertilizers,	
If wind blows waste from a trash dump into the water of a tributary,	
If dams are built across a tributary,	This affects (changes) the water amount in other tributaries connected to this tributary.



1 Preservation of resources

- It means restricting access to or use of natural resources.

Examples of resources preservation

1. Ras Mohammed Protectorate (In South Sinai)
2. Wadi Al-Hitan Protectorate (In Fayoum)

Examples of the results of (depletion) of natural resources more quickly than they can be replaced

1. Overfishing (Causes the decrease of the number of fish in oceans and seas)
2. Overusing groundwater (Causes running out of the groundwater that leads to the drying up of wells)

2 Sustainability

- It means using resources in a way that does not negatively affect the future supply of these resources.



Sustainable Situation

Cows are placed in one large area of grass.

- The grass will grow back in other areas.
- Cows will still have more food.



Unsustainable Situation

Cows are placed in many small areas of grass.

- The grass will disappear in these small areas.
- Cows will be hungry.

The resources sustainability is affected by:

- Overpopulation
- Pollution
- Overusing the resources
- Unequal distribution of resources

Recycling Water


The Water Cycle

- Solar energy drives the water cycle in nature.
- Humans can recycle wastewater and reuse it in many purposes.

Wastewater:

It is the water that has already been used in homes and different industries.

Recycling water:

It is the process of removing waste materials from water.

Wastewater engineers

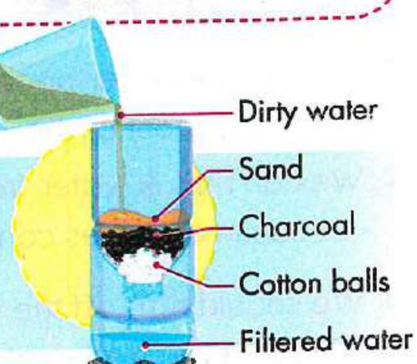
- They are specialized scientists who work in water treatment plants, such as Bahr Al-Baqar wastewater treatment plant in Egypt.

Roles of Wastewater Engineers in Recycling Wastewater

1. They decide where to build water treatment facilities.
2. They check the water quality by checking the amounts of pollutants in the treated water.
3. They test the treated water to make sure it is safe to use before it is released into rivers and lakes.
4. They design ways to protect a community from floods.
5. They calculate the amount of drinking water that a community needs.

Filter model:

It helps us remove harmful materials from the polluted water.



2 Definitions of Concept 2

Water	It is the basic liquid matter that all living organisms need to survive.
Watershed	It is an area of land where all the water from different sources flows towards a common location.
Tributaries	They are small bodies of water, such as small creeks or streams that flow into bigger rivers.
Wetland	It is an area that is partially covered with water.
Dam	It is a building built across a river to control the flow of water by holding water behind it.
Preservation	- It means restricting access to or use of natural resources. - It means preventing the use or development of natural resources in specific areas.
Sustainability	It means managing the use of natural resources without affecting their amount in future negatively.
Wastewater	It is the water that has already been used in homes and different industries.
Wastewater engineers	They are scientists who work in water treatment plants.
Recycling water	It is the process of removing waste materials from water.



3 Give Reasons For... Concept 2

1. Most of the water on the Earth's hydrosphere is undrinkable.
   - Because most of the water on the Earth's surface is salt water.
2. We can't drink water from estuaries.
   - Because estuaries contain a mixture of fresh water and salt water.
3. We should turn off the water while brushing our teeth and washing dishes.
   - To conserve fresh water.

4 The water of an estuary is a mixture of salt water and fresh water.

- Because it is formed when the fresh water of a river meets the salt water of an ocean or a sea.

5 The poor quality of water has a dangerous effect on all living organisms.

Because the poor quality of fresh water causes the death or excitation of some species of fish and amphibians living in this water.

6 Watershed maps are important.

- Because watershed maps help scientists understand how bodies of water interact with each other.

7 Farms near tributaries may cause water pollution.

- Because the waste of these farms is carried by the water of tributaries to other bodies of water connected to them.

8 There are many things that affect the sustainability of resources.

- Because resources sustainability is affected by overpopulation, pollution, or unequal distribution of resources.

9 Placing cows in a big area of grass is a sustainable situation.

- Because the grass will grow back in other areas, so the cows will still have more food.

10 Placing cows in many small areas of grass is an unsustainable situation.

- Because the cows will eat all the grass before the new grass grows back, which makes the grass disappear in these areas, and the cows will be hungry.

11 Protected areas are established in some places.

- To preserve natural resources from being depleted.

12 Humans create many methods to recycle wastewater.

- To reuse water for many purposes.

13 Wastewater engineers test the treated water before the water is released in rivers and lakes.

- To make sure that the water is safe to be used.

4 What Happens If...? Concept 2

1 The water of a river meets the water of a sea?
- An estuary is formed.

2 People don't conserve fresh water?
- We can't find fresh water to drink.

3 Water is collected in a low-lying area?
- A lake is formed.

4 There is a lot of rainfall on a river?
- The water level will rise in this river, causing flooding.

5 There's too little rainfall on a river?
- The water level in this river decreases, causing drought.

6 A factory is established near a tributary?
- The waste of the factory is carried by the water to downstream areas.

7 We burn huge amounts of fossil fuels, such as coal and oil?
- It causes water and soil pollution, which causes the death of many living organisms.

8 People use water from wells at a faster rate than it is replaced by rain?
- The groundwater may run out, causing wells to dry up.

9 We cut down trees in a fast rate?
- It may lead to deforestation, which increases the soil erosion by water and wind.

10 The quality of fresh water becomes poor?
- It causes the death or excitation of some species of fish and amphibians living in this water.

11 You mix clear water with a small amount of mud?
- The water becomes dirty.

12 A farm near a tributary uses chemical fertilizers?
- The waste of the farm will be carried by the tributary water to other bodies of water connected to it, causing water pollution.

5 Exams on Concept 3.2

Model Exam 1

Q1. (A) Choose the correct answer:

1. .... is formed when the water of a river meets the water of a sea.
   a. An estuary b. A lake c. An ocean d. A wetland
2. .... of fresh water may cause the extinction of some amphibians.
   a. Conservation b. Poor quality
   c. Recycling d. High quality
3. Plastic cups are made from ....
   a. oil products b. trees
   c. animal products d. paper

(B) Give a reason for:

- We should turn off the water while washing dishes.

....

Q2. (A) Put (✓) or (✗):

- Downstream is the place where a river starts. ( )

(B) Complete the following sentences:

1. The amount of salt water on the Earth is .... than the amount of fresh water.
2. If a farm near a tributary uses chemical fertilizers, this causes .... to the bodies of water near it.

Q3. (A) Correct the underlined word:

- Overfishing leads to <u>increasing</u> the number of fish in oceans and seas. (....................)

(B) Mention two parts of the geosphere found in the floor of an ocean.

1. .... 2. ....

Model Exam 2

Q1. (A) Choose the correct answer:

1. All the following materials can be used to filter wastewater in a simple water filter, except ....
   a. cotton b. sand c. wood d. charcoal
2. .... is a land partially covered with water.
   a. An ocean b. An estuary c. A wetland d. A lake
3. Humans can get the freshwater they need from all the following resources, except ....
   a. rivers b. seas c. groundwater d. streams

(B) Write the scientific term:

- It is the act of controlling human access to natural resources or their usage. (....................)

Q2. (A) Correct the underlined word:

- Cotton, charcoal, and mud can be used in making a simple water filter. (....................)

(B) What happens if:

1. We cut down trees in a fast rate?
   ....
2. Water is collected in a low-lying land?
   ....

Q3. (A) Put (✓) or (✗):

- The water of a small creek flows directly into a sea or a gulf. (   )

(B) Complete the following sentences:

1. The .... process is used to get filtered water from polluted water.
2. The basic liquid matter which is needed by humans, animals, and plants to survive is ....

Model Exam 3

Q1. (A) Choose the correct answer:

1. Frogs can survive in freshwater ecosystems, such as ....
   - a. seas
   - b. oceans
   - c. rivers
   - d. ponds
2. All the following are renewable resources, except ....
   - a. plants
   - b. animals
   - c. coal
   - d. water
3. Humans can .... wastewater to recycle it and use it again.
   - a. filter
   - b. boil
   - c. freeze
   - d. conserve

(B) Give a reason for:

- We can't drink water of estuaries.

....

....

Q2. (A) Put (✓) or (✗):

- Tributaries are small bodies of water that flow into a bigger river. (   )

(B) Write the scientific term:

1. They are scientists who work in water treatment plants. (................)
2. They are bodies of water that surround the continents. (................)

Q3. (A) Cross out the odd word:

- Marshes – Ponds – Rivers – Seas (................)

(B) Complete the following sentences:

1. The area of land where all the water flows in one direction to a common location, such as an ocean, is called ....
2. When the rainfall increases on a river, the level of water in this river will ...., causing ....

Model Exam 4

Q1. (A) Put (✓) or (✗):

1 Bays and seas are examples of large bodies of water. ( )

2 Rains are among the sources of fresh water. ( )

3 A stream may dry up due to increasing the level of water in it. ( )

(B) Give a reason for:

Wastewater engineers test the treated water before releasing it into rivers and lakes.

....

....

Q2. (A) Choose the correct answer:

Preventing the development of Ras Mohammed Protectorate is considered an example of ....

a. preservation
b. pollution
c. sustainability
d. consumption

(B) Complete the following sentences:

1 The wells may dry up when .... runs out.

2 In Aswan High Dam, water is used to ....

Q3. (A) Cross out the odd word:

Gulfs – Seas – Oceans – Rain water (....................)

(B) What happens if:

1 A trash dump is found near a tributary that is connected to a river?

....

2 You mix clear water with a small amount of mud?

....

Model Exam 5

Q1. (A) Choose the correct answer:

1. All of these can be removed by a simple water filter, except ....
   a. mud b. rock pieces
   c. salt d. dirt
2. .... include both swamps and ponds.
   a. Seas b. Rivers
   c. Sand dunes d. Wetlands
3. Deforestation causes water and wind to carry away soil, causing ....
   a. water pollution b. soil deposition
   c. water cycle d. soil erosion

(B) Give a reason for:

- Scientists tend to create methods to filter polluted water.

....

Q2. (A) Put (✓) or (✗):

- All oceans on Earth are connected together. (   )

(B) Write the scientific term:

1. They are small creeks or steams that flow into bigger rivers. (..................)
2. It is a freshwater body that starts at a mountain in the form of a stream and ends at a sea. (..................)

Q3. (A) Correct the underlined word:

- Water is considered a nonrenewable natural resource. (..................)

(B) Classify the following into sustainable situation or unsustainable situation:

1. Placing some cows in one large area of grass: ....
2. Burning huge amounts of fossil fuels: ....

Concept 4.1 Effects of Gravity

1 Summary of Concept 1

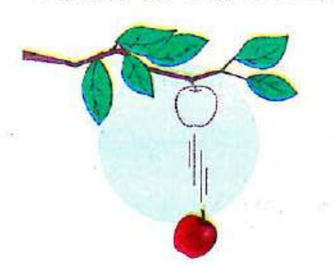
Gravity

1. Gravity is the force of pulling (attraction) between objects that have mass.
2. It is an invisible force that acts on all objects on or near Earth.
3. If there is no gravity, we will float like astronauts into space.
4. Gravity changes the direction of moving objects.

Examples of Gravity Forces

1. The Earth's Gravity

It pulls objects with mass down toward the center of the Earth.



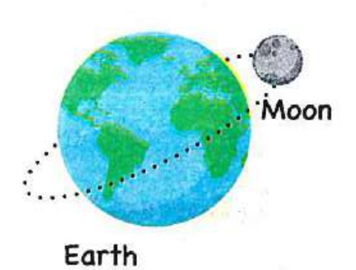
2. The Sun's Gravity

It keeps the planets in fixed orbits around the Sun.



3. The Moon's Gravity

It affects the ocean tides.



Factors Affecting Gravity between Two Objects

1. The mass of the two objects
(Gravity increases as the mass of the objects increases, and vice versa.)

2. The distance between the two objects
(Gravity increases as the distance between the two objects decreases, and vice versa.)

Force: It is a pull or push applied to an object to make it move.

Types of Forces

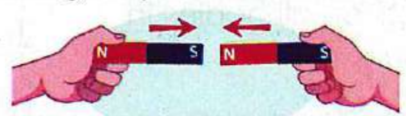
1 Magnetism

- It is the force of attraction or repulsion between two magnets or between a magnet and some objects.
- Magnets have an invisible force that cannot be seen, known as magnetism.



The attraction force of the magnet (Pulling Force)

1. A magnet pulls another magnet.

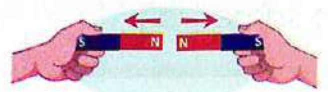


2. A magnet attracts some metal objects made of iron, cobalt, and nickel.



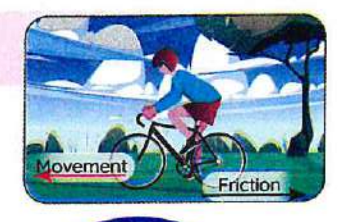
The repulsion force of the magnet (Pushing Force)

A magnet pushes (repels) another magnet.

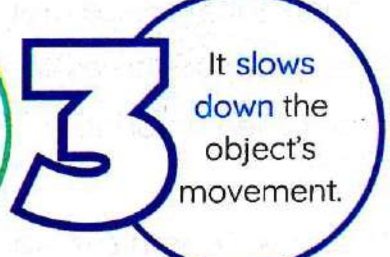


2 Friction

- It is a force that opposes the motion of a body across a solid surface or through a gas or liquid.



1. It arises between two objects touching each other.
2. It acts in the opposite direction of the object's motion.



3. It slows down the object's movement.

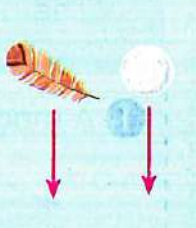
3 Air Resistance



- It is a type of friction force.
- It is a force that opposes the movement of an object as it passes through the air.
- When a skydiver opens his parachute during landing, air resistance acts against gravity, decreasing the speed of his landing on Earth.

If there is no air resistance:

- All bodies will reach the ground at the same time because the force of gravity is constant and acts on all bodies in the same way.

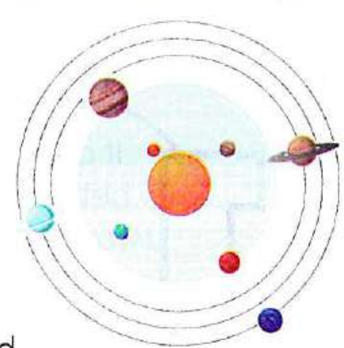


4 Wind Force

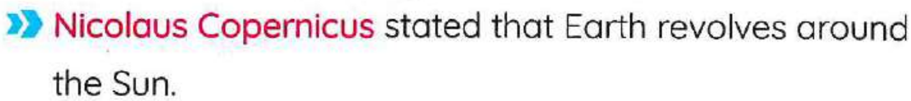


- Wind pushes the blades of a wind turbine, causing their movement.

Solar System



- Our solar system consists of the Sun and eight planets that revolve around it.
- Each planet revolves around the Sun in a fixed path called an orbit, which has an elliptical (oval) shape.
- Nicolaus Copernicus stated that Earth revolves around the Sun.



- Earth revolves around the Sun at a speed that nearly equals 107,000 km per hour.

2 Definitions of Concept 1

Gravity	• It is the force that pulls objects with mass toward the center of the Earth. • It is the force of attraction that exists between objects that have mass.
Force	It's a pull or a push that is applied to an object.
Motion	It is a change in the position of an object compared to another object.
Magnetism	It's the force of attraction or repulsion between two magnets or between a magnet and some objects.
Moon	It is a celestial body that orbits the Earth in a fixed orbit.
Friction	It's a force that opposes the motion of a body across a solid surface or through a gas or liquid.
Air resistance	It's a type of friction force that opposes the movement of an object as it passes through the air.
Law of Motion	The force of gravity is constant and acts on all objects in the same way.

3 Give Reasons For... Concept 1

1 **The moon is attracted to the Earth.**

- Due to the gravitational force of the Earth.

2 **Astronauts seem to float into space.**

- Because there is no gravity in space.

3 **Paperclips are pulled toward a magnet.**

- Due to the pulling force of the magnet.

4 **Air resistance affects the movement of an object that falls from a height.**

- Because air resistance pulls objects backward against the force of gravity, slowing down the movements of objects.

5 **The force of gravity has an important role in the solar system.**

- Because the Sun's gravity keeps the planets revolving in fixed orbits around the Sun.

6 **The gravity between two objects depends on the distance between them.**

- As the distance between two objects increases, the gravity between them decreases, and vice versa.

7 **Earth's gravity is greater than the moon's gravity.**

- Because Earth has a greater mass than the moon.

8 **The bike stops after a while when you stop pedaling.**

- Due to the friction between the tires and the ground, the bike slows down until it stops.

9 **The skydiver opens his parachute during landing.**

- To increase air resistance to the parachute and slow down his drop.

10 **The Sun is considered the center of the solar system.**

- Because the Sun has the greatest gravity in the solar system.

11 **You always land on the ground when you jump up.**

- Because the gravity pulls you toward the Earth's center.

12 **Planets revolve around the Sun in fixed orbits.**

- Due to the gravity around the Sun.

4 What Happens...? Concept 1

1 If the distance between the Earth and the moon increases to twice?

- The gravity between the Earth and the moon decreases, and the moon might float into space.

2 If the mass of the moon becomes twice its real mass?

- The gravity between the moon and the Earth increases, so the moon might crash into the Earth.

3 To the moon if there's no gravity between the moon and the Earth?

- The moon might float off into space.

4 If the mass of the moon decreases to half?

- The gravity between the Earth and the moon decreases, and the moon might float into space.

5 To the ball when it is thrown up into the air?

- Gravity pulls it down, changing its direction.

6 To the planets if the Sun has no gravity?

- The planets float off into space and leave their orbits around the Sun.

7 If a magnet is placed near some paperclips?

- The magnet attracts the paperclips.

8 If a skydiver opens his parachute during landing?

- Air resistance increases, so the speed of his drop decreases.

9 If a metal ball and a feather fall down from a tower?

- The metal ball reaches the ground first.

5 Exams on Concept 4.1

Model Exam 1

Q1. (A) Choose the correct answer:

1. The gravity force depends on the .... of the object.
   a. mass b. temperature c. shape d. color
2. In the solar system, planets stay in their orbits due to the gravity of ....
   a. the moon b. the Sun c. Mars d. Earth
3. Magnetism is a force that attracts objects made of the following materials, except the ....
   a. nickel b. cobalt c. iron d. wood

(B) What happens to:

- The moon if there's no gravity between the moon and Earth?

....

Q2. (A) Put (✓) or (✗):

- Air resistance opposes the movement of objects through air. ( )

(B) Write the scientific term:

1. It is the force of attraction that exits between objects that have mass. (............)
2. It is the law which states that the force of gravity is constant and acts on all objects in the same way. (............)

Q3. (A) Cross out the odd word:

- Magnetism – Gravity – Friction – Earth (............)

(B) Imagine that jar (A) contains air, while jar (B) doesn't contain air. Then, answer the following:

1. Complete: In jar (A), the feather is affected by .... air resistance than the stone.
2. Why are the feather and the stone moving with same speed in jar (B)?

....

Jar A Jar B

Model Exam 2

Q1. (A) Choose the correct answer:

1. The moon has greater gravity than that of ....
   a. Earth only b. the Sun c. a magnet d. Earth and the Sun
2. A person can exert a weak force to move .... (Giza 2023)
   a. a big truck b. a real car
   c. a very big rock d. a toy car
3. The Earth attracts objects towards ....
   a. its center b. the sky c. the moon d. the Sun

(B) What happens if:

- A skydiver opens his parachute during landing?

....

Q2. (A) Put (✓) or (✗):

- Gravity only affects objects in motion. (   )

(B) Complete the following sentences:

1. .... is a pull or push that is applied to an object.
2. Earth revolves around the Sun in the shape of an .... orbit.

Q3. (A) Correct the underlined word:

- Friction force acts in the same direction of the object's motion. (................)

(B) Observe the following figures, then mention if the acting force is attraction or repulsion:

1. S N N S

....

2.

....

Model Exam 3

Q1. (A) Choose the correct answer:

1. .... is a factor that acts against the force of gravity.
   a. Magnetism
   b. The mass of an object
   c. Air resistance
   d. The shape of an object
2. The orbit that each planet revolves in around the Sun has .... shape.
   a. a circular
   b. an oval
   c. a zigzag
   d. a rectangular
3. The solar system consists of ....
   a. the Sun and moon only
   b. the Sun and a group of planets
   c. the Sun and Earth only
   d. a group of planets only

(B) What happens to:

Planets of the solar system if the Sun has no gravity?

....

Q2. (A) Put (✓) or (✗):

A magnet can push the objects which are made of some metals, such as iron. ( )

(B) Complete the following sentences:

1. When a skydiver opens his parachute, his landing velocity ....
2. .... lies in the center of the solar system.

Q3. (A) Correct the underlined word:

Gravity is the force that slows down moving objects and opposes their motion. (................)

(B) Mention the two factors that affect the force of gravity between two objects.

1. ....
2. ....

Model Exam 4

Q1. (A) Choose the correct answer:

1 Magnetism is a kind of force that involves ....

a. repulsion only
b. attraction only
c. repulsion and attraction
d. visible and invisible forces

2 The gravitational force of an object .... as its mass increases.

a. increases
b. decreases
c. equals zero
d. doesn't change

3 The skydiver in the sky is affected by ....

a. gravity only
b. air resistance only
c. magnetism
d. gravity and air resistance

(B) What happens if:

The distance between the moon and Earth increases to its twice?

....

Q2. (A) Cross out the odd word:

Cobalt – Wood – Nickel – Iron (............)

(B) Complete the following sentences:

1 An astronaut floats in space due to the absence of ....

2 The attraction force between the Earth and the Sun is .... than that between the Earth and the moon.

Q3. (A) Put (✓) or (✗):

The Earth's gravity changes the direction and mass of moving objects. ( )

(B) Which one of the following objects will reach the ground first on dropping them from a tower? And why?

....
....
....
....

Object 1
Object 2

Model Exam 5

Q1. (A) Choose the correct answer:

1 The materials that are attracted to the magnet include ....

a. iron and nickel
b. aluminum and copper
c. copper and silver
d. silver and gold

2 The direction of Earth's gravity is always toward the ....

a. the center of the moon
b. the poles of the Earth
c. the sky of the Earth
d. the center of the Earth

3 A table standing on the ground needs .... to move.

a. sunlight
b. mass
c. a force
d. air

(B) Give a reason for:

The speed of your bike decreases when you stop pedaling.

....

Q2. (A) Correct the underlined word:

Objects move down toward the ground due to the effect of magnetism. (..........

(B) Write the scientific term:

1 He is a scientist that proved that the Sun is the center of our solar system. (..........

2 It is the force that opposes the movement of an object across a solic surface, liquids, or gases. (..........

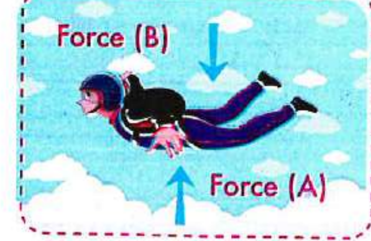
Q3. (A) Put (✓) or (✗):

Earth revolves around the moon at a speed that nearly equals 107,000 km per hour. (

(B) Look at the following figure, then complete:

1 Force (A) is called ....

2 Force (B) is called ....



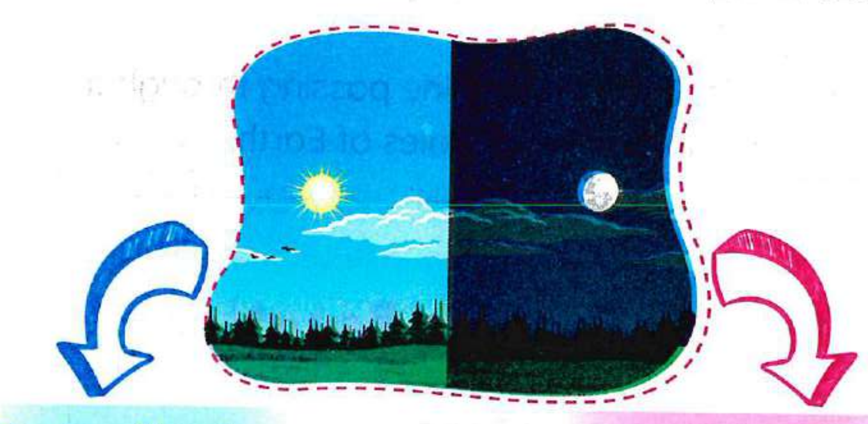
Lesson 1

Concept 4.2

Activity 1 Can You Explain?

You can observe the cycle of day and night every day.

• يمكنك ملاحظة تعاقب الليل والنهار كل يوم.



During the day

• You can observe shadows of objects move.

• يمكنك ملاحظة تغيُّر موقع الظل.

During the night

• You can observe the moon and some stars appear to move across the sky.

• يمكنك رؤية القمر، وبعض النجوم تظهر كأنها تتحرك في السماء.

Earth's rotation around its axis causes:

North Pole

Axis

South Pole

1. The regular pattern of day and night.

   تعاقب الليل والنهار.

2. The movement of objects' shadows throughout the day.

   تحرُّك الظل خلال النهار.

3. The Sun, planets, and stars appear to move across the sky.

   رؤية الشمس والكواكب والنجوم تتحرَّك في السماء.

Unit 4

Activity 2 Day and Night

- Earth rotates (spins) all the time.
- Earth takes a whole day (24 hours) to make one complete turn on its axis.
- The apparent motion of the Sun is due to the Earth's rotation on its axis.

• تدور الأرض طوال الوقت حول محورها.

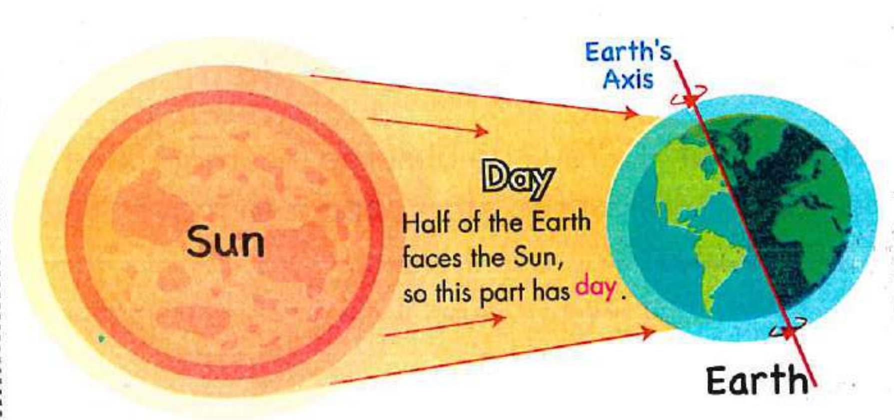
• تستغرق الأرض يومًا كاملًا (24 ساعة) لتقوم بدوران كامل حول محورها.

• تحدث الحركة الظاهرية للشمس؛ بسبب دوران الأرض حول محورها.

Earth's axis: It is an imaginary line passing through the North and South Poles of Earth.

محور الأرض: هو خط افتراضي (تخيلي) يمر من القطب الشمالي إلى القطب الجنوبي.

During Earth's Rotation



Night
The other half of the Earth that faces away from the Sun doesn't receive any light, so this part has night.

We cannot feel the Earth spinning, but we know that from the regular pattern of day and night.



Evaluate Your Learning!

Put (✓) or (✗):

- The regular pattern of day and night happens due to Earth's rotation on its axis. ( )

Activity 3 What Do You Already Know About Patterns of Motion in the Sky?

- The Sun appears to change its position in the sky during the day.
- The Sun rises in the east and sets in the west.

Imagine that you are facing the north direction of the Earth

In the early morning
(The Sun rises in the east.)



The Sun would be to your right.

At noon
(The Sun is in the center of the sky.)



The Sun would be above your head..

In the late afternoon
(The Sun sets in the west.)



The Sun would be to your left.

If you change your direction, facing the north or the south, the Sun will always rise in the east and set in the west.

Evaluate Your Learning!

- ***Adam took different pictures during the day of a tree that is located in the north direction of the Earth. Complete the following sentences using the words from the brackets:***

(10 a.m. - 12 p.m. - 2 p.m.)

1. Picture (a) was taken at ....
2. Picture (b) was taken at ....



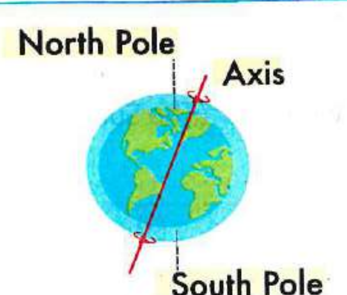
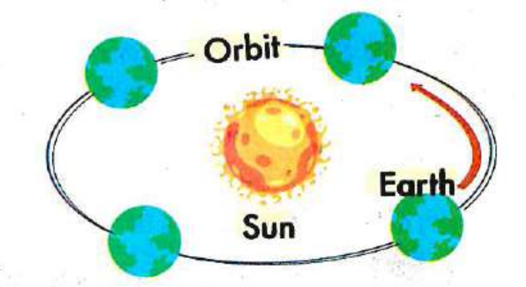






Unit 4

Rotation or Revolution

Rotation	Revolution
• It is the spinning of an object around its axis. •هو دوران الجسم حول محوره.	• It is the orbiting of an object around another object. •هو دوران الجسم في مسار حول جسم آخر.
	

Examples

Rotation	Revolution
• Earth rotates on its axis once every day.	• Earth revolves around the Sun in an orbit.

• An axis is an imaginary line that runs through the center of an object.

•المحور هو خط افتراضي يمر بمركز جسم ما.

• An orbit is an imaginary path where an object revolves around another object.

•المدار هو مسار تخيلي يدور فيه الجسم حول جسم آخر.

Evaluate Your Learning!

» *Complete the following sentences using the words in brackets:*

1. Earth (revolves – rotates) on its axis once every (24 hours – year).
2. Earth (revolves – rotates) around the Sun in a fixed orbit

Concept 2

Exercises on Lesson 1

Q1. Choose the correct answer:

1. Day and night phenomenon occurs due to the rotation of the Earth around .... (Cairo /Qalyobia 2024)
   a. the Sun
   b. the moon
   c. the solar system
   d. its axis
2. The Earth rotates on its axis once every .... hours. (Dakahlia 2024)
   a. 24 days
   b. 24 hours
   c. 365 days
   d. 365 hours
3. If one part of the Earth receives sunlight for 14 hours a day, the other part of the Earth receives sunlight for .... a day.
   a. 14 hours
   b. 12 hours
   c. 10 hours
   d. 24 hours
4. At the noon, the Sun appears in the .... in the sky. (Cairo 2023)
   a. east
   b. west
   c. center
   d. left
5. The Sun appears as it moves from .... to .... (Luxor 2023)
   a. south – north
   b. west – east
   c. east – west
   d. north – south
6. You can see the Sun in the east at ....
   a. 7 p.m.
   b. 8 a.m.
   c. 5 p.m.
   d. 12 a.m.
7. If you travel from your country to another, the Sun will .... (Sharkia 2023)
   a. rise in the west and set in the east
   b. rise in the south and set in the north
   c. rise in the north and set in the south
   d. rise in the east and set in the west
8. In the following figure, which statement is true?
   a. The Sun will reach the east in less than 6 hours.
   b. The Sun will set in less than 6 hours.
   c. The figure shows the early morning.
   d. The figure shows the location of the Sun at noon.



9. The Earth's axis is an imaginary line that passes through the .... (Alex. 2023)
   a. center of the solar system.
   b. center of the moon.
   c. two poles of Earth.
   d. center of the Sun.

10. .... is the orbiting of an object around another object. (Alex. 2023)
   a. Rotation
   b. Spinning
   c. Revolution
   d. Gravity

11. The sequence of day and night results from the ....
   a. revolution of the Earth around the Sun
   b. rotation of the Earth on its axis
   c. revolution of the Sun around the Earth
   d. rotation of the Sun on its axis

12. If the Earth completed its spinning on its axis in 12 hours, the pattern of day and night ....
   a. would never occur
   b. would occur every 24 hours
   c. would take shorter time to occur
   d. would take longer time to occur

Q2. Put (✓) or (X):

1. The Sun, stars, and moon appear to move across the night sky due to the Earth's rotation. ( )
2. The movement of a tree's shadow throughout the day results from the spinning of Earth around its axis. ( )
3. At midday, the Sun is perpendicular to you above your head. ( )
4. All the parts of Earth receive sunlight at the same time. (Port Said 2024) ( )
5. Half of Earth appears dark at night as it receives a lot of light.
6. The Sun rises in the east and sets in the west. (Dakahlia 2024) ( )
7. The Sun appears in the same place in the sky throughout the day. ( )
8. If you traveled to another country, the Sun would be moving from the east to the west. ( )
9. The orbiting of Earth around the Sun is called rotation. ( )

10 The sequence of day and night is due to the rotation of the Earth on its axis. (Dakahlia 2024) (   )

11 Earth's revolution around the Sun causes day and night. (Alex. 2024) (   )

12 The Earth takes (12) hours to make a complete cycle on its axis. (Qalyoubia 2024) (   )

Q3. Correct the underlined word:

1 The Sun rises in the west. (Cairo 2024) (........................)

2 In the early morning the sun would be in the west direction in the sky. (Alex. 2024) (........................)

3 Earth takes 24 hours to make two successive complete cycles on its axis. (........................)

4 Earth takes 24 hours to make one complete rotation around the Sun . (........................)

Q4. Write the scientific term:

1 It is a phenomenon that occurs when the Earth rotates on its axis. (Alex. 2024) (........................)

2 It is a phenomenon that occurs when half of the Earth faces the Sun. (........................)

3 It is a phenomenon that occurs when half of the Earth doesn't receive any sunlight. (........................)

4 The spinning of Earth on its axis. (Cairo 2023) (........................)

5 It is an imaginary line passing through the two poles of Earth. (Aswan/Damietta 2024) (........................)

6 It is the time taken by the Earth to complete one rotation on its axis. (........................)

Q5. Complete the following sentences:

1. When half of the Earth faces the Sun, it has .... and the other half has ....
2. The Sun appears as it moves from .... to .... due to the Earth's .... on its ....
3. Earth rotates its axis once every .... hours. (Beheira 2024)
4. In early morning, the Sun appears in the .... while at noon it appears in the .... of the sky. (Cairo 2023)
5. The orbiting of the Earth around the Sun is called ....
6. The imaginary line that passes through the Earth's center is called .... (Giza 2023)

Q6. Classify the following to revolution or rotation: (Qalyobia 2024)

1. It is the spinning of an object around an axis. (..................)
2. It is the spinning of an object around another object. (..................)

Q7. Give reasons for:

1. The occurrence of day and night. (Damietta/Giza 2024)

....

2. The Sun appears to move across the sky from the east to the west.

....

Q8. What happens if:

1. Half of the Earth faces the Sun? (Giza/ Sharkia 2024)

....

....

2. The Earth rotates on its axis? (Giza/ Gharbia 2024)

....

....

3. The Earth doesn't rotate on its axis? (Port Said 2024)

....

المراجعة رقم (4)

اختبار شهر مارس





Worksheets with model answer on concept (3.2)

Worksheet (1)

[1] Choose the correct answer:

1- The basic liquid matter which is needed by humans, animals and plants to survive is…………….

a. milk   b. water   C. Oil   d. alcohol

2- Water can control the………. of living organisms bodies.

a. length   b. height   C. temperature   d. volume

3- All the following are from sources of water on the Earth, except……………

a. ground water   b. ponds   C. glaciers   d. molten rocks

4- At the end of Nile River , there is a/an……...between Nile River and Mediterranean sea.

a. lake   b. wetland   C. Ocean   d. estuary

5- ……………are formed when water collects in low-lying areas.

a. Seas   b. Oceans   C. Lakes   d. Rivers

6- Among the kinds of wetlands are…………………..

a. swamps and lakes   b. marshes and bogs

c. ponds and oceans   d. swamps and estuaries

7- Estuary is formed when the water of……….meets the water of…………

a. a river - a sea   b. a river- groundwater

c. a sea - an ocean   d. a sea-a wetland

[2] Put (√) or (×):

1-Oceans are considered as saltwater bodies . ( )

2- Among the sources of fresh water are rains. ( )

3- The percentage of fresh water is higher than that of salt water, so we should conserve salt water. ( )

4- Turning off the water tap, while washing your hair is from the ways to conserve water. ( )

5- Rivers often start in mountains in the form of estuaries. (   )
6- Assail lake is surrounded by land and it is a low-lying area. (   )
7-The type of water in wetlands is salt water only. (   )
8- There is an estuary between Nile River and Mediterranean Sea.(   )

[3] Write the scientific term of each of the following:

1- It is the liquid that all living organisms need to live (………………..….)
2- A type of water which is suitable for drinking (………………..)
3- A water body that often starts in the mountain as a stream. (……………….)
4- The large water body that is surrounded by land. (……………………….)
5-The water bodies that surround the continents. (……………………….)
6- It is a land area which is partially covered with water. (…………………….)

[4] Complete the following sentences:

1- In High Dam, water is used to generate………………

2- Rivers contain……..... water while oceans contain…………………water.

3- Glaciers are sources of fresh water which have a………state of matter.
4- We must take a quick shower to conserve………………

[5] Give reasons for:

1- We must conserve fresh water

…………………………………………………………………………………………

2- You should turn off water tap during brushing your teeth

…………………………………………………………………………………………

[6] What happens if…?

1- Water is collected in a low-lying area.

…………………………………………………………………………………………

Worksheet (2)

[1] Choose the correct answer:

1-People obtain their needs of ……………….that is found in lakes , rivers , streams and ground water .

a-oxygen gas b-seaweed c-salt water d-fresh water .

2- The area of land where all the water flows to a common location as ocean is called………………

a. tributary b. estuary c. wetland d. watershed

3- The level of water in a river may increase causing flooding, when there is more……………………..

a. rainfall b. wind c. sunlight d sediments.

[2] Put (√) or (X):

1- We must conserve fresh water because it is limited on Earth. ( )

2- Building factories is from human strategies to control and conserve fresh water. ( )

3-When there is more rainfall, the level of water in rivers will decrease causing flooding. ( )

[3] Write the scientific term of each of the following:

1- It is an area of land where all the water flows to a common location usually an ocean, a sea or other large water body. (…………………..……)

[4] Complete the following sentences:

1-When the rate of rainfall decreases , the level of water in rivers will ………. Causing …………..

2-The type of water that is found in rivers most of lakes and streams is ………………water .

[5] Give reasons for:

1- Scientists tend to preserve freshwater sources on Earth

……………………………………………………………………………………

[6] What happens if…?

1. The quality of fresh water becomes poor. ?

……………………………………………………………………………………

Worksheet (3)

[1] Choose the correct answer:

1. Tributary usually ends by the flowing of its water into bigger………..

a. ocean b. sea C. river d. lake

2. The correct flowing of water bodies that are connected with others is

a. bigger rivers → tributaries → Oceans.

b. tributaries → bigger rivers → Oceans.

C. Oceans → tributaries → bigger rivers.

d. bigger rivers → Oceans → tributaries.

3.All the following reasons cause water pollution in a river , except …………

a-litter of a nearby trash dump .

b-waste of a nearby factory .

c-chemical fertilizers of a nearby farm .

d-building a dam across the river .

[2] Put ( ) or (X):

1- The water of tributaries flow directly into seas and oceans. ( )

2- Upstream is the place where a river starts. ( )

3-Dam can hold the water behind it which causes a change in the amount of water in a water body . ( )

[3] Write the scientific term of each of the following:

1- They are small water bodies such as small creeks or streams that flow into bigger rivers. (……………..……….)

2- A building established across a river which can hold water behind it. (…………………………..……)

[4] Complete the following sentences using the words below:

(Chemical fertilizers - bays - creeks – seas - dams - streams)

1- Tributaries are considered as small……….or……….that flow into bigger rivers then into large water bodies as……………..and…………………

2- A farm that is found near a tributary may cause pollution to the water body i this farm using…………..

3. Building…………across a tributary can change the amount of water in it.

[5] Give reasons for:

1- Farms near tributaries may cause water pollution.

……………………………………………………………………………………………

[6] What happens if…?

1- A trash dump is established near a tributary that is connected with a river.

……………………………………………………………………………………………

Worksheet (4)

Q.1) Complete the following:

1- Plastic is made from…………while paper and wood are made from……….

2- The run out of …………………………... causes wells to become dry.

3- To conserve water ,we can ….time of washing our hands.

Q.2) Choose the correct answer:

1- If some rabbits are placed in only one large area of grass ,this is considered as an example of ……………….of green areas.

a- Deforestation b- preservation c- sustainability d- pollution

2- Prevent developing of Ras Mohammed Protectorate is considered as an example of …………….

a- Preservation b- pollution
c- sustainability d- consumption

3- Cutting down too many trees of forests leads to……………………
a. deforestation and soil deposition. b- overpopulation and soil erosion
c. deforestation and soil erosion. d- overpopulation and soil deposition

4- Family (A) Consists of 3 members and family (B) consists of 4 members, if you know that each member use 20 liters to washing hand daily, so the total amount of water that is used by family (A) is……………that is used by family (B).
a. more than b-less than c- double d- equal to

Q.3) Write scientific term :

1- The action of control reaching of humans to the natural resources. (…………………….)

2- It means using resources in a way that does not negatively affect the future supply of theses resource. (……………………..)

Q.4) Give reason for:

1- We should turn of water during washing dishes.

……………………………………………………………………………………………

2- Countries prevent using or developing natural resources in some protected areas of land.

……………………………………………………………………………………………

Q.5) Choose from column (B) what suits it in column (A):

(A)	(B)
1- Cotton	a- Can be used in making plastic.
2- Oil products	b- Can be used in making paper.
3- Trees	c- Can be used in making clothes.
	d- Can be used in making cans.

1…………………… 2……………………… 3…………………

Worksheet (5)

Q.1) Put (√) or (x) :

1- Recycling of wastewater means removing waste materials from it. ( )

2- Dams can be used to filter polluted water to be used again. ( )

3- Adding some of mud to a clean water can pollute it. ( )

4- Cotton can be used as a filter to remove waste from water. ( )

5-Water is considered as a nonrenewable natural resource. ( )

Q.2) Choose the correct answer:

1- …………….can be used to recycle wastewater to be used again in human activities.

a- Bottles b-Filters c- Dams d- Generators

2- All the following materials can be used to filter wastewater in simple water filter ,except…………………….

a- Cotton b- wood c- charcoal d- sand

3-…………….process is used to get filtered water from polluted water.

a- Recycling b- Sustainability c- Preservation d- Conservation

4-Sand, charcoal and cotton can be used to remove all the following materials from wastewater, except……………………….

a. small pieces of plastic. b- salt dissolves in water

C. small particles of mud d-small pieces of rocks

5- In simple water filter, wastewater must pass through……………………….

a- cotton hen charcoal then sand
b- cotton hen sand then mud.
C- charcoal hen cotton then sand.
D- sand then, charcoal then cotton.

Q.3) What happens if:

- You mix clear water with small amount of mud.

……………………………………………………………………………………

Q.4) Give reason:

- Scientists recycle fresh wastewater to get filtered water again.

……………………………………………………………………………………

Q.5) Look at the following figure, then answer:

1. ……………
2. ……………
3. ……………
4. ……………
5. ……………

A) Label the figure using the following words:
(charcoal- wastewater- cotton- filtered water- sand)

B) The tool above shows a simple …………..,and it is used to remove …………….materials from wastewater. (complete)

Worksheet (6)

Q.1) Put (√) or (x) :

1-In water treatment plants, harmful materials are removed from wastewater to reuse it again. ( )

2- Wastewater engineers do not test the treated water after finishing the water treatment process. ( )

3- Wastewater engineers decide where to build water treatment plants. ( )

4- Hydrologists are scientists that work on recycling wastewater in water treatment plants. ( )

Q.2) Write the scientific term:

1- They are stations which recycle wastewater by removing harmful materials from wastewater to reuse it. (……………………….)

2- Scientists who work in water treatment plants. (………………….)

3- It is the water that has already been used in homes and different industries. (……………….....)

Q.3) Give reason for :

-Wastewater engineers test the treated water.

……………………………………………………………………………………….

Q.4) Choose the correct answer:

1- All the following may happen to the treated water, except………………..

a- It is used again by human b- it is released into air

c- it is released to river d- it is released to lakes

2-Water cycle is considered as an example of……………..

a-Recycling water b- preservation water

c- overusing water d- conservation water

Q.5) Complete the following:

1- Wastewater engineers work in ……….plants and design tools that provide us with clean………………

2- Water treatment plants recycle the……………….by removing harmful materials from it to reuse again.

3- Wastewater engineers design ways to protect communities from…………………

Model answer on concept (3.2)

Worksheet (1)

{1} 1- b / 2- c / 3- d / 4 – d / 5 - c / 6 – b / 7 – a

{2} 1-(√) / 2- (√) / 3- (X) / 4- (√)/ 5-(×) / 6- (v) / 7- (×)/ 8 – (v)

{3}

1-Water	2-Fresh water	3-River	4-Lake	5-Ocean	6-Wetland

{4} 1- electricity 2- fresh – salt 3- solid 4- fresh water

{5} 1- Because there is a limited amount of fresh water on earth

2- To conserve fresh water

{6} 1-A lake is formed

Worksheet (2)

{1} 1- d / 2- d / 3- a

{2} 1- (v) 2-(×) 3- (×)

{3} 1- Watershed

{4} 1- decrease - drought / 2- fresh

{5} 1- Because , the amount of fresh water is limited on Earth

{6} 1- It leads to death of living organisms and extinction of some species live in fresh water.

Worksheet (3)

{1} 1- c / 2- b / 3- d

{2} 1- (×) / 2- (v) / 3- (v)

{3} 1- Tributaries / 2- dam

{4} 1- Creeks – streams – bays – seas / 2- chemical fertilizers / 3- dams

{5} 1- Due to using of chemical fertilizers that cause water pollution

{6} 1- The litter of the trash dump will be blown into the water of tributary then into the river causing water pollution.

Worksheet (4)

Q.1) Complete:

1-oil products – trees . 2- groundwater 3- decreases.

Q.2) Choose the correct answer:

1- c / 2- a / 3- c / 4- b

Q.3)Write scientific term :

1- preservation. 2- sustainability.

Q.4) Give reason for:

1- To conserve fresh water. 2- To preserve natural resources.

Q.5) Choose from column (B) what suits it in column (A):

1.c 2.a 3.b

Worksheet (5)

Q.1) Put (√) or (x) :

1- (√) / 2- (x) / 3- (x) / 4- (√) / 5- (x)

Q.2) Choose the correct answer:

1- b / 2- b / 3- a / 4 –b / 5-d

Q.3) What happens if:

It will become dirty water.

Q.4) Give reason:

Because fresh water is a limited renewable natural resource which is very important for all living organisms.

Q.5) Look at the following figure, then answer:

A) 1- wastewater 2- sand 3- charcoal 4- cotton 5- filtered water.

B) Water filter - harmful

Worksheet (6)

Q.1) Put (√) or (x) :

1- (√) 2- (x) 3-(√) 4-(x)

Q.2) Write the scientific term:

1- Water treatment plants. 2- Wastewater engineers. 3- Wastewater.

Q.3) Give reason for :

To make sure it is safe before the water is released to rivers and lakes or used by human.

Q.4) Choose the correct answer:

1-b 2 -a

Q.5) Complete the following:

1-water treatment –water.

2-wastewater.

3- Floods.





Worksheets with model answer on concept (4.1)

Worksheet (1)

1-Choose the correct answer

1. A boy on a slide moves down toward the ground due to the effect of…………

a. the boy's height. b. gravity.

c. friction. d. the temperature of air.

2. Gravity keeps the moon in orbit around……………………………

a. Sun. b. Earth. c. itself. d. another moon

3. Gravitational force of Earth is affected by……………………

a. mass and time. b. mass and distance

c. mass only. d. distance only

4. If there is no Earth's gravity, the moon would……………...

a. revolves faster around Earth b. still orbit the Earth

c. attracts to Earth. d. floats off into space

5. All the following are properties of Earth's gravity, except……………

a. it pushes objects upward. b. it affects the moon.

c. it pulls objects downward. d. it is a type of attraction force.

6. Earth attracts objects towards…………………

a. its center. b. the sky. c. the moon. d. the sun.

2- Write the scientific term of each of the following:

1. A force that pulls object down toward the Earth's surface.

(…………………………………………………)

2. A celestial body that orbits the Earth.

(…………………………………………………)

3. A phenomenon takes place in oceans and seas due to gravity of moon.

(…………………………………………………)



Worksheet (2)

1-Put (√) or (×)

1. Magnet must touch objects to attract them. ( )
2. Force is the reason of motion of any body. ( )
3. Magnet has an invisible force called magnetism. ( )
4. Gravity is similar to magnetism because both of them has only pulling force. ( )
5. After leaving a squeezed spring, it has no force to return back to its original state. ( )
6. Small planets have bigger gravity than big planets. ( )
7. Gravity affects only on the moving objects but doesn't affect the objects at rest. ( )
8. Gravity is attraction or repulsion force between two objects. ( )

2- Give reasons for:

1. Paper clips are pulled toward the magnet.

……………………………………………………………………………………………

2. The ball changes its direction after we throw it upwards.

……………………………………………………………………………………………

3. Gravity of Earth is greater than gravity of the moon.

……………………………………………………………………………………………

3- What happens if...?

1. You squeeze a spring then leave it free.

……………………………………………………………………………………………
……………………………………………………………………………………………

2. There is no gravity on Earth.

……………………………………………………………………………………………



Worksheet (3)

1- Choose the correct answer:

1. ……………...force acts on all objects on Earth.

a. Gravity b. Speed c. Electric d. magnetism

2. Gravity depends on the…………………… of a body.

a. speed b. mass c. length d. age

3. A table stands on the ground needs……………to move.

a. sunlight b. mass c. force d. air

2- Put (V) or (X):

1. All objects on Earth's surface is affected by magnetism force. ( )
2. Gravity of Earth push objects towards its center. ( )
3. The direction and mass of an object are changed due to gravity. ( )
4. Any object on Earth's surface is affected by repulsion force of gravity( )

3- Complete the following sentences using words below:

(Direction - gravity- center - pulling)

1. The direction of Earth's gravity is always toward………………… of Earth.
2. The force of gravity is always……………. force, and it changes the……………… Of movement.
3. Any object has……………………depending on its mass.



Worksheet (4)

1- Complete the following sentences:

1. A magnet has………….. force that attracts and pulls metal objects toward it.
2. A parachute in air is affected by……………………. that acts against the……………… force of Earth.
3. A person can control the speed of his bike by using…………….. to slow down its movement.
4. The force that arises between the bicycle brake and the tires is called……………...which slows down the movement of the bicycle.
5. Air resistance is a type of……………… force.
6. The direction of…………………. force opposes the direction of a body moves through air.
7. The attraction force between the Sun and Earth is……………… than that between Earth and the moon because the Sun has………………mass.

2- Write the scientific term of each of the following:

1. The force that slows down the movement of objects through air.

   (…………………………………………………)

2. The force by which metals are attracted or pulled to a magnet.

   (…………………………………………………)

3. A type of friction force that opposes the movement of an object as it passes through air. (…………………………………………………)
4.
5. The tool that is used by skydiver to slow his drop.

   (…………………………………………………)



3- Give reasons for:

1. Skydiver opens his parachute during landing.

………………………………………………………………………………………

2. When you press the bicycle brake, its speed will stop moving after few seconds.

……………………………………………………………………………………

3. Some iron nails are attracted to a magnet.

………………………………………………………………………………………

Worksheet (5)

1- Put (✓) or (x):

1. Air resistance is a factor that speeds up the falling objects toward the Earth. ( )
2. All objects on Earth's surface are affected by gravity force which pulls objects downward. ( )
3. There is no air in space so, air resistance slows down the movement of objects through space. ( )
4. If there is no air resistance on Earth, all objects will reach the Earth's surface at the same moment when dropping them from the same height. ( )
5. Air resistance force acts in the opposite direction of gravity force. ( )
6. Heavier objects reach Earth's surface before smaller objects due to the effect of air resistance which affects their movement. ( )
7. Air resistance is a type of pulling force. ( )



2- Complete the following sentences using the words below:

(Law of Motion - slows down - gravity- air resistance - longer - shorter - constant)

1. **The force that pulls objects down toward Earth's surface is called…………………**
2. **When the skydiver opens his parachute the force of…………………makes its speed……………………**
3. **When throw a plastic ball with holes from 5-meter height, it will take………..….. time to reach the ground while a paper clip takes……………… time when it is thrown from the same height.**
4. **The law which states that the force of gravity is………… and acts on all objects in the same way is called……………………….……**

Worksheet (6)

1- Choose the correct answer:

1. **The force of…………………… keeps the planets on their paths around the Sun.**

a. air resistance   b. friction   c. gravity   d. electricity

2. **Gravity is……………………………force that holds all objects in their places.**

a. visible pulling   b. visible pushing
c. invisible pulling   d. invisible

3. **The planets revolve around the Sun in fixed…………… orbits.**

a. oval   b. irregular   c. rectangular   d. triangular

4. **The speed of Earth's revolution around the Sun is nearly……………… km per hour.**

a. more than 100,000   b. more than 200,000
c. less than 100,000   d. less than 50,000

5. **…………………………is (are) the center of the solar system.**

a. The Earth
b. The Sun
c. The moon and Earth
d. The Sun and Earth

2- Put (V) or (x):

1. The Sun revolves around Earth. ( )
2. The planets revolve around the Sun by the effect of gravitational pushing force. ( )
3. Gravity is an attraction force that can be seen easily. ( )
4. The orbit of each planet has an ellipse shape. ( )
5. The Earth's gravity keeps all planets in their orbits. ( )
6. The scientist Nicolas Copernicus stated that Earth revolves around the Sun. ( )

Worksheets with model answer on concept (4.2)

Worksheet (1)

1- Choose the correct answer

1. The imaginary line that passes through Earth's center is called

a. the day. b. the axis. c. the night d. the pole.

2. The orbiting of an object around another object is called

a. revolution. b. spinning. c. rotation. d. speed.

3. the appears in the ………….. during early morning .

a. east b. west c. north d. south

2-Complete the following sentences using the words below:

(The center of the sky Earth - east - axis - 24 hours – earth)

1. Occurrence of day and night is due to the rotation of……..on its…………..
2. Earth completes one rotation on its axis once every……….
3. In the early morning the Sun appears in ……………. while at noon it appears In……………….



3- Give reasons for:

1. Occurrence of day and night.

………………………………………………………………………………

………………………………………………………………………………

2. Half of Earth appears dark at night.

………………………………………………………………………………

………………………………………………………………………………

3. The Sun appears as it moves across the sky.

………………………………………………………………………………

………………………………………………………………………………

4- What happens if ..?

1-Earth doesn't rotate on its axis.

………………………………………………………………………………

………………………………………………………………………………

2-Half of Earth faces the Sun.

………………………………………………………………………………

3-Earth completes its spinning on its axis in 12 hours only.

………………………………………………………………………………

………………………………………………………………………………



Model answer on concept (4.1)

Worksheet (1)

1- choose

1. b 2. b 3. b 4. d 5. a 6. a

2- Write scientific term

1. Gravity. 2.The moon. 3. The ocean tides.

Worksheet (2)

1 - Put (V) or (x)

1. (x) 2. (✓) 3. (✓) 4. (x) 5. (x) 6. (x) 7. (x) 8.(X)

2- Give reason

1. **Because of the force of magnetism.**
2. **Because gravity force always pulls it downwards.**
3. **Because the mass of Earth is greater than the mass of the moon.**

3- What happen

1. **The spring will be pushed back when you leave it free.**
2. **All objects on its surface will float off into space.**

Worksheet (3)

1- Choose

1. a 2. b 3. c

2- Put (V) or (x)

1. (x) 2. (x) 3. (x) 4. (x)

3- Complete

1. Center 2. Pulling – direction 3. Gravity



Worksheet (4)

1- Complete

1. Magnetism 2.air resistance – gravity

3.Brake 4. Friction 5. Friction 6. air resistance 7. bigger – bigger

2- Write scientific term

1. Air resistance. 2. Magnetism. 3. Air resistance. 4. Parachute.

3- Give reason

1. To slow down his speed due to air resistance.
2. Because the brake produces friction force
3. Because magnetism force pulls them to the magnet.
4.

Worksheet (5)

1- Put (V) or (x)

1. (x) 2. (✓) 3. (x) 4. (✓) 5. (✓) 6. (✓) 7. (x)

2- Complete

1. gravity. 2.air resistance - slows down. 3. longer-shorter

4.constant-law of motion

Worksheet (6)

1- Choose

1. c 2. c 3. a 4. a 5. b

2- Put (V) or (x)

1. (x) 2. (x) 3. (x) 4. (✓) 5. (x) 6. (✓)



Model answer on concept (4.2)

Worksheet (1)

1- Choose the correct answer

1. (b) 2. (a) 3. (a).

2-Complete the following sentences using the words below:

1-Earth - axis 2-24 hours 3-East - The center of the sky Earth

3-Give reasons for:

1. Due to the rotation of Earth on its axis.

2. Because it doesn't receive sunlight.

3. Due to the rotation of Earth on its axis.

4-What happens if….?

1. Phenomenon of day and night will not happen.

2. This half has day.

3. Day and night phenomenon happens.

المراجعة رقم (5)

اختبار شهر مارس





Give the reason.

1- Scientists recycle fresh wastewater to get filtered water again.
Because fresh water is limited and very important for living organisms

2- Farms near tributaries may cause water pollution
Due to using of chemical fertilizers that cause water pollution

3- Countries prevent using or developing natural resources in some protected areas of land
To preserve natural resources

4- Wastewater engineers test the treated water
To make sure it is safe before it is used by humans

5- The moon is attracted to Earth.
Due to the gravitational force between them

6- The gravity between two objects is affected by the distance between them
Because when distance between them decreases, the gravity increases and vice versa

7- The force of gravity has an important role in the solar system.
Because gravity between sun and planets keeps the planets revolve in fixed orbits

8- Paper clips are pulled toward the magnet.
Due to the force of magnetism

9- The ball changes its direction after we throw it upwards.

Because the gravity pulls it downward

10- Gravity of Earth is greater than gravity of the moon

Because the mass of Earth is greater than the mass of the moon

11- Skydiver opens his parachute during landing.

To slow down his speed on landing due to air resistance

12- When you press the bicycle brake, its speed will stop moving after a few seconds

Because the brake produces friction force that slows the movement until it stops

13- Some iron nails are attracted to a magnet.

Due to the force of magnetism

14- Air resistance affects the movement of an object which falls from a height.

Because it slows it during falling

15- A paper sheet takes longer time to reach Earth's surface than a paper clip if they are thrown from the same height

Because the paper sheet has more surface area so it has more resistance and takes longer time than paper clip

16- Planets revolve around the sun in fixed orbits.

Because of the gravitational force between the sun and the planets

17- Occurrence of day and night
Because of the rotation of Earth on its axis

18- Half of Earth appears dark at night
Because it doesn't receive sunlight

19- The sun appears as it moves across the sky
Because of the rotation of Earth on its axis

20- Occurrence of seasons
Because of the revolution of the Earth around the sun

21- Although Earth rotates on its axis, we don't feel its movement
Because we are attached to Earth and moving with the same speed of Earth

22- The length of the shadow of an object changes throughout the day
Because of the change of position of the sun in the sky




What happens to/ if?

1- You mix clear water with a small amount of mud.
It will become dirty water.

2- If a trash dump is established near a tributary that is connected with a river
The litter of the trash dump will be blown into water of tributary then into river causing water pollution

3- The distance between the moon and Earth increases to twice
The gravitational force will be smaller.

4- The mass of the moon decreases to half.
The gravity will decrease.

5- The mass of the moon becomes twice its real mass
The gravity increases so the moon comes closer to Earth and it might crash into Earth

6- The gravity of Earth is a repulsion force not attraction force
All objects wil move upward a way from the Earth's surface

7- There is no gravity on Earth.
All objects will float off into space.

8- Planets if the gravity of the sun disappears.
They will leave their orbits and float off into space

9- The speed of skydiver if he opens his parachutes during landing
The speed decreases gradually





10- The gravity pulling force between two bodies when their masses decreases

The gravity will decrease.

11- A metal ball and a feather are fallen down from a tower.

The metal ball will reach the ground first.

12- You throw two iron balls have the same mass from the same height

They will reach the ground at the same time.

13- There is no air resistance and two objects with different masses are thrown from the same height

They will reach the ground at the same time.

14- Earth does not rotate on its axis.

Day and night will not occur

15- Half of Earth faces the sun.

This half has day.

16- Earth completes its spinning on its axis in 12 hours only.

Day and night occur in 12 hours

17- The length of the shadow of an object at noon

It will be the shortest shadow of the object

18- The shadow of an object if the sun locates east or west in the sky.

The shadow of the object will be the longest



كيفية طباعة صفحات معينة من ملف معين

مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9



خطوة 1

خطوة 2
اختيار اسم الطابعة بتاعتك

خطوة 3
كتابة الصفحات المراد طباعتها
نكتب رقم 4 ثم نكتب الشرطة دي – ثم نكتب 9

خطوة 4
اختيار نوع الورق

خطوة 5
اختيار A4

خطوة 6